

ABSTRACT

An electrosurgical instrument for fragmenting, cutting and coagulating tissue is described which includes a handpiece, a tool assembly and a nosecone. Preferably, the tool assembly is formed of an electrically conductive material and includes a first end having a distal tool tip and a second end adapted to be connected to an acoustic vibrator. The tool assembly at least partially defines an aspiration channel and is preferably supported by the handpiece. The nosecone is positioned about a distal end of the handpiece and a proximal end of the tool assembly in a fluid tight manner. A switch assembly for controlling delivery of electrosurgical energy to the tool assembly is supported on the nosecone. Preferably, the switch assembly is overmolded onto an inner housing of the nosecone by an electrically insulative material. In a preferred embodiment, the electrosurgical instrument may include an ionizable gas supply channel which communicates with an electrode to provide plasma coagulation.

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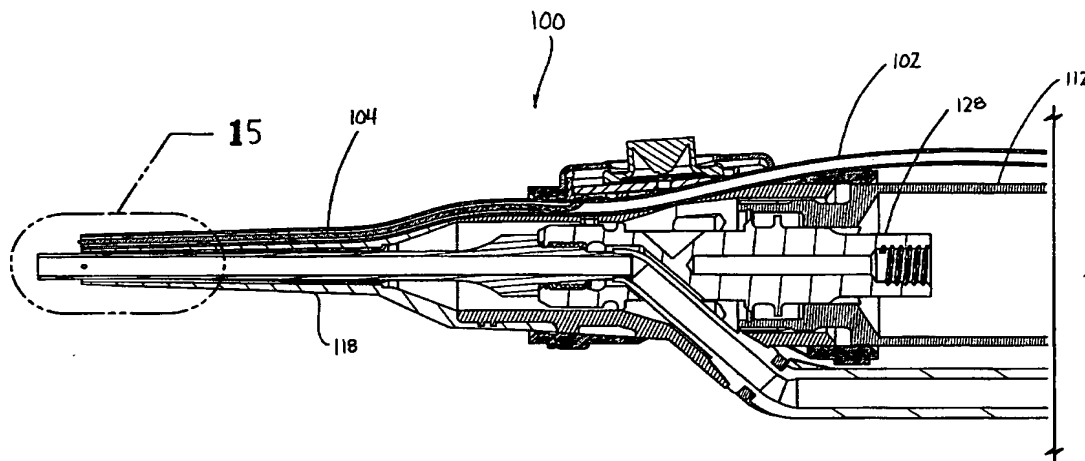
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(57) Abstract: An electrosurgical instrument for fragmenting, cutting and coagulating tissue is described which includes a hand-piece, a tool assembly and a nosecone. Preferably, the tool assembly is formed of an electrically conductive material and includes a first end having a distal tool tip and a second end adapted to be connected to an acoustic vibrator. The tool assembly at least partially defines an aspiration channel and is preferably supported by the handpiece. The nosecone is positioned about a distal end of the handpiece and a proximal end of the tool assembly in a fluid tight manner. A switch assembly for controlling delivery of electrosurgical energy to the tool assembly is supported on the nosecone. Preferably, the switch assembly is overmolded onto an inner housing of the nosecone by an electrically insulative material. In a preferred embodiment, the electrosurgical instrument may include an ionizable gas supply channel which communicates with an electrode to provide plasma coagulation.